AMENDMENTS TO THE CLAIMS

Please amend claims 1 and 11.

The following listing of claims replaces all versions, and listings, of claims in this application.

Listing of Claims:

1. (Currently Amended) A portable electronic device comprising an electrochemical cell, said cell comprising a positive electrode, a negative electrode and an electrolyte, wherein said positive electrode comprises a mesoporous structure having a periodic arrangement of substantially uniformly sized pores with a ~~cross-section~~ diameter in the order of 10^{-9} to 10^{-8} m.

2. (Previously Presented) A portable electronic device according to claim 1, wherein the mesoporous structure of the positive electrode is a metal, a metal oxide, a metal hydroxide or a combination thereof.

3. (Previously Presented) A portable electronic device according to claim 1, wherein the mesoporous structure of the positive electrode comprises a metal, a metal oxide, a metal hydroxide or a metal oxy-hydroxide, said metal oxide, metal hydroxide or metal oxy-hydroxide, forming a surface layer over said metal and extending over the pore surfaces.

4. (Previously Presented) A portable electronic device according to claim 1, wherein the mesoporous structure of the positive electrode comprises a metal that is nickel or nickel alloys.

5. (Previously Presented) A portable electronic device according to claim 1, wherein said mesoporous structure comprising a metal oxide, hydroxide or oxy-hydroxide is gold oxide; palladium oxide; nickel oxide (NiO); nickel hydroxide ($Ni(OH)_2$), nickel oxy-hydroxide (NiOOH) or ruthenium oxide.

6. (Previously Presented) A portable electronic device according to claim 1, wherein the mesoporous structure has a pore diameter in the range of about 1 to 10 nm.

7. (Previously Presented) A portable electronic device according to claim 1, wherein the mesoporous structure has a pore number density of about $4x10^{11}$ to $3x10^{13}$ pores per cm^2.

8. (Previously Presented) A portable electronic device according to claim 1, wherein at least 85 % of the pores in said mesoporous structure have pore diameters within 30 % of the average pore diameter.

9. (Previously Presented) A portable electronic device according to claim 1, wherein the mesoporous structure has a hexagonal arrangement of pores that are continuous through the thickness of the electrode.

10. (Previously Presented) A portable electronic device according to claim 9, wherein the hexagonal arrangement of pores has a pore periodicity in the range of 5 to 9 nm.

11. (Currently Amended) A portable electronic device according to claim 1, wherein the negative electrode comprises a mesoporous structure having a periodic arrangement of substantially uniformly sized pores with a ~~cross-section~~ diameter in the order of 10^{-9} to 10^{-8} m.

12. (Previously Presented) The portable electronic device of claim 1, wherein said mesoporous structure is a film having a thickness in the range of about 0.5 to about 5 micrometers.

13. (Previously Presented) The portable electronic device of claim 1, wherein said negative electrode comprises a material that is carbon, cadmium, iron, a palladium/nickel alloy, an iron/titanium alloy, palladium, or $LaNi_5H_X$.

14. (Previously Presented) The portable electronic device of claim 1, wherein said negative electrode comprises a material that is carbon or palladium.

15. (Previously Presented) The portable electronic device of claim 1, wherein said mesoporous structure comprises nickel and a nickel oxide, a nickel hydroxide or a nickel oxy-hydroxide that is NiO, $Ni(OH)_2$ and NiOOH, said nickel oxide, nickel hydroxide, or nickel oxy-hydroxide forming a surface layer over said nickel and extending over the pore surfaces, and wherein said negative electrode has a mesoporous structure comprised of carbon or palladium.

16. (Previously Presented) The portable electronic device of claim 15, wherein said negative electrode comprises nanoparticulate carbon.

17. (Previously Presented) The portable electronic device of claim 1, wherein said cell is constructed to function as a battery, as a supercapacitor or a combination thereof.

18. (Previously Presented) A portable electronic device according to claim 6, wherein the mesoporous structure has a pore diameter in the range of about 2.0-8.0 nm.

19. (Previously Presented) A portable electronic device according to claim 7, wherein the mesoporous structure has a pore number density of $1x10^{12}$ to $1x10^{13}$ pores per cm^2.

20. (Previously Presented) The portable electronic device of claim 8, wherein at least 85 % of the pores in said mesoporous structure have pore diameters to within 10 % of the average pore diameter.

21. (Previously Presented) The portable electronic device of claim 8, wherein at least 85 % of the pores in said mesoporous structure have pore diameters to within 5 % of the average pore diameter.

22. (Previously Presented) The portable electronic device of claim 4, wherein said Nickel alloys are alloys with a transition metal, nickel/cobalt alloys, iron/nickel alloys, cobalt, platinum, palladium or ruthenium.